

## FILE ARCHIVAL

Ramprakash H. Sathyanarayan

### 5        ABSTRACT

Archival in a computer is performed by creating a process if an item to be copied is a directory, and alternatively by copying the item if the item is a file. The created process in turn recursively performs the just-described acts, e.g. the act of creating or copying, with another item located in the just-described directory. Therefore, depending on the number of directories to be copied, a corresponding number of processes may be created, which speeds up copying. A default limit on a resource available to a copy process may be set to a maximum limit for the resource, for speedy copying. Archival may be speeded up by transferring data from the file into a temporary buffer, locking the temporary buffer, and invoking a direct memory access (DMA) process. Archival may be speeded up also by checking for and eliminating the copying of circular links (such as a symbolic link that points to itself). Such a created process may send an email message if a resource at a destination is full, and wait to be restarted subsequent to sending the email message. A user that receives the email message makes appropriate arrangements (e.g. deletes files in a destination disk or loads a new disk), and thereafter restarts the stopped process. On being restarted, the process recopies a file if it was in the middle of copying the file when it was stopped.